

CLAIMS

1. A multi-component hybrid protein comprising one or more antigen-binding antibody fragments covalently linked to one or more serum carrier proteins or fragments thereof.
2. A hybrid protein according to Claim 1 comprising one, two or three antigen-binding fragments covalently linked to one serum carrier protein or a fragment thereof.
3. A hybrid protein according to Claim 1 or Claim 2 wherein each serum carrier protein is thyroxine-binding protein, transthyretin, α 1-acid glycoprotein, transferrin, fibrinogen or albumin or a fragment thereof.
4. A hybrid protein according to Claim 1 to Claim 3 wherein each antibody fragment is a monovalent Fab fragment optionally containing one or more additional amino acids attached to the C-terminus of the CH1 domain.
5. A hybrid protein according to Claim 4 wherein the antibody fragment is a monovalent Fab or Fab' fragment.
6. A hybrid protein according to any one of the preceding claims comprising one antigen-binding antibody fragment covalently linked to an albumin molecule or a fragment thereof.
7. A hybrid protein according to Claim 6 wherein the antibody fragment and albumin are directly linked through the C-terminal amino acid of the antibody to the N-terminal amino acid of the albumin optionally through a spacing group.

8. A hybrid protein according to Claim 6 wherein the antibody fragment and albumin are indirectly linked by a bridging molecule between the thiol groups of a cysteine residue present in the antibody and another in the albumin.

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9. A hybrid protein according to Claim 8 wherein the cysteine residue present in the albumin is at position 34.

10. A hybrid protein according to Claim 8 or Claim 9 wherein the bridging molecule is from around 10Å to around 20Å in length.

11. A hybrid protein according to Claim 10 wherein the bridging molecule is an optionally substituted hexylene chain.

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12. A hybrid protein according to any one of the preceding claims covalently linked to one or more effector or reporter groups.

13. A pharmaceutical composition comprising a hybrid protein according to any one of the preceding claims together with one or more pharmaceutically acceptable excipients, diluents or carriers.

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